

CELSTRAN® PA6-GF60-01 AF3001 Natural

60% long strand glass fiber reinforced nylon 6
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Typical mechanical properties

Tensile Modulus	20400 MPa	ISO 527-1/-2
Stress at break, 5mm/min	275 MPa	ISO 527-1/-2
Strain at break, 5mm/min	1.9 %	ISO 527-1/-2
Flexural Modulus	18400 MPa	ISO 178
Flexural Strength	455 MPa	ISO 178
Charpy notched impact strength, 23°C	54 kJ/m ²	ISO 179/1eA

Thermal properties

Temp. of deflection under load, 1.8 MPa	215 °C	ISO 75-1/-2
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Other properties

Density	1690 kg/m ³	ISO 1183
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Injection

Drying Temperature	70 - 80 °C	
Drying Time, Dehumidified Dryer	2 - 4 h	
Processing Moisture Content	0.18 %	
Melt Temperature Optimum	290 °C	Internal
Max. mould temperature	80 - 100 °C	

Additional information

Injection molding

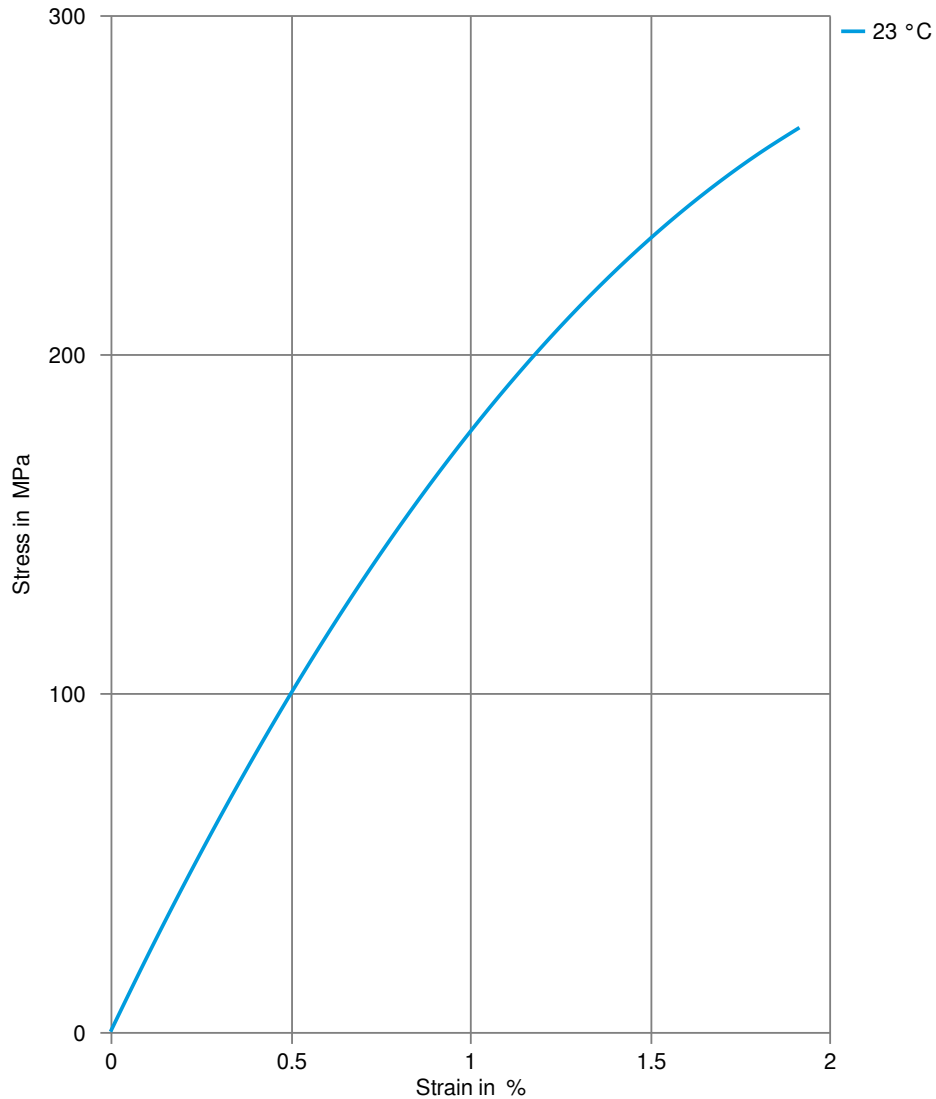
Celstran can be processed on a standard injection molding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition, and 20% metering. A free flowing check ring assembly is recommended.

Melt Temp: 290-300°C.
 Mold Temp: 90- 100°C.



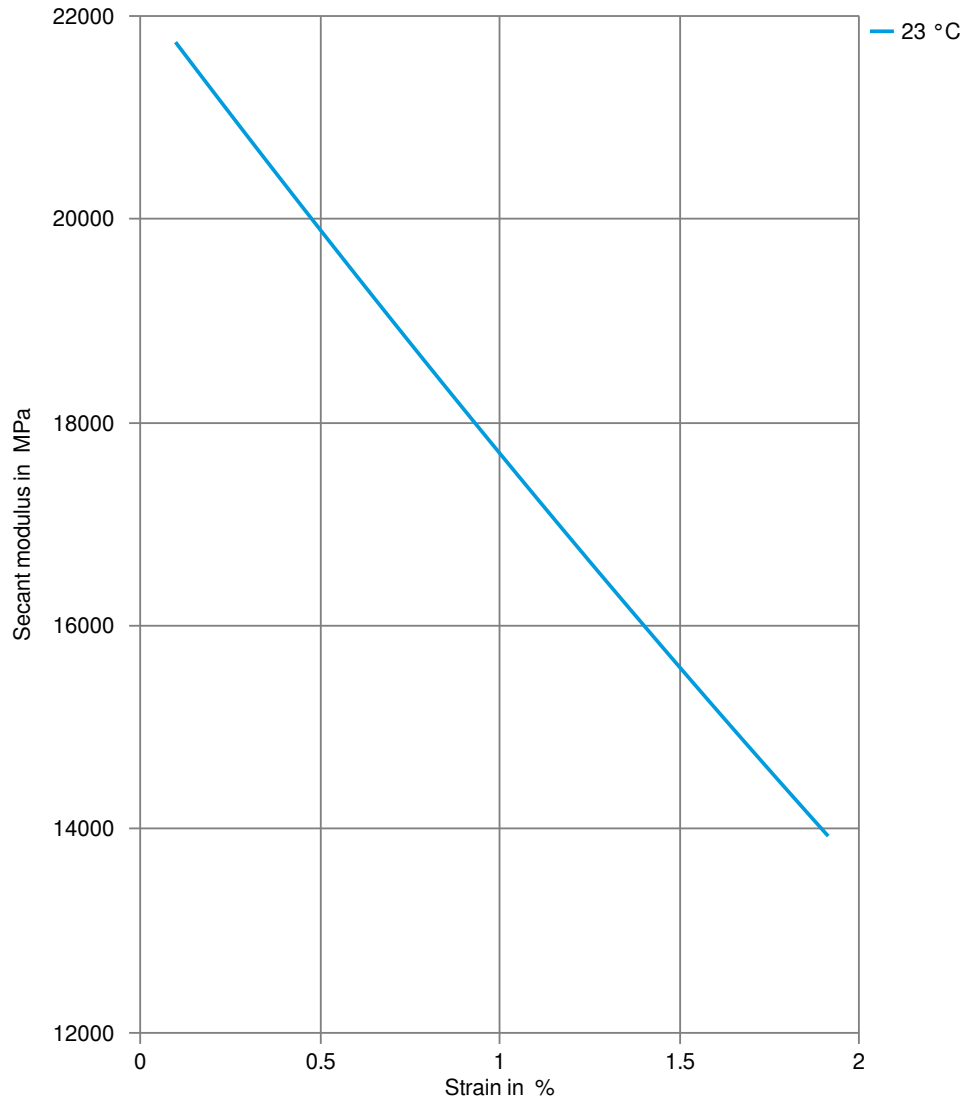
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Stress-strain



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Secant modulus-strain



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Processing Texts

Pre-drying

CELSTRAN PA should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be $\leq -30^{\circ}\text{C}$. The time between drying and processing should be as short as possible.

Longer pre-drying times/storage

Note: Material can be over dried and may discolor.

Injection molding

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Melt Temp: $290-300^{\circ}\text{C}$.

Mold Temp: $90-100^{\circ}\text{C}$.

Injection molding Preprocessing

PA6&PA66 drying requirements: 4 hrs. @ 80°C .
A dehumidifier or desiccant dryer is recommended.

